



# Employee engagement in Outokumpu OK1-program

The case of Tornio Works

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## ABSTRACT

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<p>The objective of this thesis is to find out how Outokumpu's employees experience engagement towards Outokumpu's continuous improvement program. This thesis is aiming to find out important matters which may have an impact on employee engagement and therefore aided by these findings, facilitate the implementation of forthcoming continuous improvement program in Outokumpu. The subject is approached through the following research questions: 1) What is the current situation of employee engagement in Outokumpu's continuous improvement program?, 2) Why do motivating problems, if any, emerge in Outokumpu's continuous improvement program?, and 3) How can employee engagement be increased in Outokumpu's continuous improvement program in the near future?</p> <p>Qualitative study aided by quantitative research methods are used in this study. Interviews, surveys and document review were used as data collecting techniques. Interviews and surveys were conducted with managers and employees involved in the subject matter in the case company to gain increased understanding of the subject. The theoretical framework of the research is based on theories of organizational change management, employee engagement, leadership and continuous improvement.</p> <p>Issues shared by managers and employees were discovered and significant issues to improve continuous improvement program in the case company were recognized. Due to the forthcoming new generation's continuous improvement program, this study facilitates its success. In addition, managers' and employees' attitudes towards the subject were revealed. Their coterminous aspirations were recognized which could be helpful for the future, with the aid of organizational change management, leadership and employee engagement theories. In addition, the research shows the present engagement level and the action to be taken for gained enhanced employee engagement.</p>	
Keywords: Change management, employee engagement, continuous improvement, leadership	

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## 1 INTRODUCTION

### 1.1 Motivation and Background

Today, companies are executing programs such as Six Sigma, lean manufacturing and total quality management to improve their productivity and reduce waste. New ways of doing business emerge. These programs are connected together with operational excellence in pursuit of creating improved yields, eliminating wastes in production, getting improved quality, and enlarging customer satisfaction (Stuart 2007, 1.)

Operational Excellence, OpX, is for employees, managers and executives and it extends to every level and every person in the organization to produce the right products in time and with minimal wastes. Everybody in the organization is part of it. With the help of operational excellence people in organizations know that in their individual areas, there should be a visible flow of products and information. Employees should know what to do if there are abnormalities in production. Operational excellence is in organizations to guide people in organizations to make choices to ensure sound production all without requiring the assistance of management (The Institute for Operational Excellence 2012.)

Operational excellence is traditionally related with the industrial sector. The car manufacturer Toyota and conglomerate General Electric (GE) are often mentioned as pioneers in executing operational excellence. Operational excellence has been embraced successfully by the manufacturing industry. Today, operational excellence covers areas from product development to logistics and to managerial functions. Operational excellence has even continued to expand further into non-industrial segments (Stuart 2007, 1.)

Even though organizations have their interests in operational excellence, they are not often able to implement operational excellence viewpoint at once. To attain true operational excellence, organizations need to commit to a ground-up, ongoing manner of an approach to conducting business. Equally importantly, organizations need proper executives to guide their operational excellence efforts. When executing operational excellence, organizations have two critical challenges which they should address in order to collect all of the benefits operational excellence has, i.e. influencing working

culture changes in the right way and deploying the right talent. Whenever a change is executed in an organization, there is going to be a natural amount of internal resistance. Since operational excellence is a true turnover of culture, the execution of operational excellence can be cumbersome (Stuart 2007, 3.)

Based on the authors experience in the case company the successful utilization of operational excellence is crucial for Outokumpu. During the authors MBA studies and simultaneous production excellence change agent-training (Peca-training) in Outokumpu, the author of this research have understood and learned to acknowledge the importance of requirements that operational excellence creates. Therefore the research questions are formed to support the authors employer interests in prospective problems faced in continuous improvement projects. This study could be interesting for readers outside Outokumpu since the business world is becoming increasingly complex, and leading the change that operational excellence deployment creates, must be adapted efficiently in all business environments and organization levels, even outside Outokumpu.

## 1.2 Research Objectives and Research Questions

The general aim of this research is to support the operational excellence managers in the case company with better understanding of the change management in Outokumpu's OK1 program by providing key insights from the employee engagement point of view. The research objectives are to recognize how employee engagement is experienced by Outokumpu's employees and how change management contributions can gain the yield of Outokumpu's OK1-program which is a part of the OpX activities in Outokumpu.

The research questions are formulated with intent that findings could help future's continuous improvement organizations in Outokumpu to understand the importance of the management in changes and employee engagement.

On the grounds of motivation, background and the topic of this thesis, this research focuses on the following research questions:

- 1) What is the current situation of employee engagement in Outokumpu's continuous improvement program?

- 2) Why do motivating problems, if any, emerge in Outokumpu's continuous improvement program?
- 3) How can employee engagement be increased in Outokumpu's continuous improvement program in the near future?

These questions need to be studied for the reason that continuous improvement program is planned to be adjusted to increase its suitability for the Outokumpu Tornio site. This study aims to add the understanding of how employees commit themselves to continuous improvement operations in Tornio. This study uses and compares the data of other Outokumpu strategic business units in Sweden and in England which are also utilizing Outokumpu's concept of operational excellence OK1.

### 1.3 Limitations

The most noticeable limitation in completing this thesis can be the fact that the researcher of this study has been participating in OK1 activities and has gone through the change agent training designated to expand OK1 program further to employees. Some contemplation in this research can have contaminations of the researcher's own point of view and therefore be objective.

Another limitation to the research is the generalization of research findings or the final induction of the research. Within this factual connection it is significant to notice that the findings, analysis of result and conclusion are limited to be contingent to the context. Results found in this research may be difficult to expand into a broader context.

### 1.4 Structure of Thesis

To create a profound understanding of difficulties in change management and employee engagement in the case company, this thesis intends to supply insights that would improve the reader's viewpoint in matters to the employee engagement and organizational change through the following steps:



Chapter two reviews the case organization to provide information concerning the case company Outokumpu. Chapter three discusses the research choices and presents data collection and analysis methods. Chapter four reviews the relevant literature for this research and it aims to set a basis of understanding of the theoretical framework for the concepts of change management and employee engagement. Chapter five presents empirical findings and discusses the validity of findings. The analysis of results and the proposal for OK1 improvement are also included in to chapter five. Finally chapter six summarizes the analysis and findings of this research.

## 2 CASE OUTOKUMPU STAINLESS

Outokumpu is a global leader in stainless steel with the vision to be the undisputed number one in stainless. Outokumpu employs some 7 600 people in more than 30 countries. Outokumpu has plants in Finland, Sweden, the UK and the US. Outokumpu produces stainless steel in many various forms. Outokumpu produces raw materials using their own chrome mine and ferrochrome facility. The newest investment in Outokumpu is going to be an expansion of ferrochrome production capacity in Tornio. The investment aims to double ferrochrome production from the current annual capacity of ferrochrome 265 000t to 530 000 tons. The capital expenditure for the investment is EUR 440 million during 2010-2013. (Outokumpu 2010.)

Based on the researcher's own experience in the case company, Outokumpu, as many other world class companies, focuses on operational excellence by developing and adopting the best practices in all of its operations. Ever since from 2004, Outokumpu's vision has been to become the undisputed number one in stainless steel. The vision discussed has been considered to be achieved with several approaches and one part of them is operational excellence. From 2005, one part of the OpX-activity in Outokumpu has been a program called OK1. OK1 consists of several pillars and tools where employees from all organizational levels have been participating in different improvement projects. Pillars focuses on reducing process waste, attack losses, to reduce defects on products, to optimize the material and to create better brand of the factory. OK1 attempts to change employees' behavior and understanding towards continuous improvement by changing working places to be additional effective, safe and pleasant for employees. Outokumpu has been utilizing a common OK1 format in all of its units around the world.

Based on the researcher's own experience of OK1 activities in Outokumpu, an essential attribute for OK1 is teamwork. In pillars, teams are e.g. trying to solve problems of production lines, reduce wastes from everyday manners etc. OK1 teams are trying to solve most of the common problems faced in daily work with the aid of OK1 tools. Unfortunately OK1 program has increased the work load for employers. OK1 projects and attendant meetings have been mostly conducted during the regular working time. For the ordinary employee in a team of OK1 project, the weekly amount of OK1 work is approximately 4 hours. For the leader of the OK1 project time consumption is even

more than that. Employees involved in these projects should still have enough time and strength to manage their regular working tasks. All these new tasks require added flexibility from both employer and employees. The big change in working behavior and new tools deployed may have influenced on employee engagement.

Based on the researcher's knowledge and practice as a production excellence change agent, OK1 in Outokumpu utilizes 6 different pillars. Pillars provide the foundation to the operational excellence which in turn serves organizational goals, direction and additionally consistency and focus. (Studer 2007, 63). Pillars are ancillary instruments to make OK1 tools additionally manageable and understandable. The pillars used in Outokumpu Tornio Works are as follows:

- Focused improvement (FI)
  - The FI-pillar develops the know how to attack the losses such as machine losses, organizational losses, speed losses, process waste and labour productivity losses.
  - The FI-pillar constantly ensures that the strategy of company is aligned with the work of all pillars.
- Autonomous management (AM)
  - The AM-pillar develops and improves an operators' proprietary of production lines and machines.
- Planned maintenance (PM)
  - The PM-pillar develops the factory performance by reducing unexpected stops with the help of planned maintenance.
- Quality (PQ)
  - The PQ-pillar develops and supports production quality by recognizing and reducing sources of defects.
- Lean flow (LF)

- The LF-pillar develops a better understanding of the company therefore the factory performance can be increased by creating a perfect value stream of all handling in company.
- Process optimization (PO)
  - The PO-pillar develops processes where raw material usage and wastes varies considerably much.

Outokumpu has adopted a goal to have a strong and unified corporate culture throughout the company's organization. One company thinking in Outokumpu is needed to implement new tools and techniques in diverse strategic business units (SBUs) in different countries. Outokumpu has harnessed innovative business models and instruments to improve its competitiveness. Key performance indicators (KPIs) are widely used in Outokumpu to help organizations to define and evaluate how successful they are, typically in terms of making progress towards its long-term organizational goals. (Outokumpu 2009.) One Outokumpu conception has been generated, although the culture change is going to take time. The evolution in Outokumpu is to be seen as an opening to boost operational effectiveness in processes by cross-cultural co-operation between people. Nevertheless, different countries or excessively autonomous corporate cultures can restrict operational development and success of strategic goals.

### 3 RESEARCH METHODOLOGY AND DATA

#### 3.1 Methodological Choices

In this thesis the main used methodology is qualitative, with a focus on single case and the manner of a formative evaluation approach. Quantitative data presented in this thesis views samples from employers which are interpreted with statistic chi-squared test, which makes this thesis to a mixed method thesis.

Qualitative research is trying to make sense of a given research problem or topic from the viewpoint of the local population or the organization it deals with. Qualitative research presents information concerning sensible parts of a topic. These are e.g. conflicting behaviors, beliefs, opinions, emotions, and relationships of persons. (Mack & Woodsong & Macqueen & Guest & Namey 2005, 1.)

According to Taylor (2005, 91), quantitative research cannot effectively assess the full assortment of human behavior. The main rationale of quantitative research is to create a valid and objective explanation of phenomenon. In quantitative research the researcher is trying to prove how situations and data can be controlled as results of the variables. With the aid of quantitative research methods the researcher is trying to avoid his or her own bias to research itself. By doing a research with quantitative research methods the researcher tries to understand the phenomena by separating and probing the interrelationship with and between variables in a controlled setting. (Taylor 2005, 91.)

McNabb (2008, 120–121) states that quantitative research using numbers as an alternative of words to interpret something is often easier for both the researcher and the reader to agree on what is being said. Whenever managerial decisions are to be made, administrators have to understand quantitative research methods and how quantitative data should be interpreted. (McNabb 2008, 115). In this thesis, quantitative data and the analysis of it are used as supportive aids to entirety of the qualitative study.

Case study is a one type of qualitative research. According to Ospina (2004, 2), among the advantages of doing qualitative research are the following: Flexibility to follow unexpected ideas during research and explore processes effectively, sensitivity to

contextual factors, ability to study symbolic dimensions and social meaning, increased opportunities. (Ospina 2004, 2.)

Balbach (1999, 3) states that “though case studies are considered to be a qualitative technique, they can contain quantitative information.” Additionally, Balbach (1999, 4) predicates that case studies should exclusively be utilized for program evaluation if they are the best technique to take action to the, what happened question. “A case study is practical for evaluating programs where programs are exceptional, where an established program is executed in a new locus, where an outcome warrants further study, or when a program takes place in an unpredictable environment.” (Balbach 1999, 3–4.)

Evaluative research is much relative with basic research. When carrying out an evaluative research, researcher has to collect data or determine what is necessitated to be measured. Evaluative research can be differentiated into two different categories of research: Summative evaluation and formative evaluation. Summative research is focusing on outcomes of a program. The nature of the summative research is quantitative and it is often used as guide line if the program is worth of to be continued. Formative evaluation is utilized to observe how well the program is working. Formative evaluation tends to be more qualitative and it is often used to revise and improve the program. (Connaway & Powell 2010, 74 – 77.)

In this thesis case of Outokumpu Tornio Works, it would be helpful to have better understanding for a strong and long lasting stainless steel making culture. Outokumpu Tornio Works is a conglomerate, where long lasted success with its far-off location from competitors and main markets, may have been formatting the employee engagement in the continuous improvement program. To get better understanding of the phenomenon discussed, a qualitative research with some aid of quantitative methods should give a decent proposal for Outokumpu Tornio Works, how to improve employee engagement in Outokumpu’s forthcoming continuous improvement program.

### 3.2 Data Collection Method

Balbach (1999, 6-7) argues very shortly that when doing case study evaluation, the main data sources are interviews for focus groups, observation and documents. The case study evaluation uses purposive sampling nearly every time. Purposive sampling is

useful when the evaluator is studying a special phenomenon and what happened and why it happened. Purposive sampling targets a particular group of people. In this thesis the survey participants as well as the managers for interviews are selected in a meaning of a purposive sampling. (Balbach 1999, 6-7.) In this thesis the observation was not thinkable because the amount of OK1 meetings and projects were too many. Due to the distance and location between research targets, the data was collected in form of surveys from several OK1 project participants and interviews were executed for 5 top managers in the Tornio site, responsible in OK1 program.

A recruitment strategy is for recognizing and signing up people to participate in a research study. The research should be started by screening potential participants and the writer of the research has to consider the amount of people to take part in the survey. The researcher also has to contemplate the location, and the approach to be employed. (Mack & Woodson & Macqueen & Guest & Namey 2005, 7.) Screening of sampling for this thesis was done among the OK1 participants and the top managers who protect the OK1 program. During the execution of this research the survey questions were asked from 20 white collars and 20 blue collars in Sheffield in the UK and in Torshälla in Sweden. The survey questions in Tornio Works were asked from 50 white collars and from 50 blue collars. Five interviews were carried out with five executive managers in Tornio.

### 3.3 Data Analysis Methods

According to Ghauri and Gronhaug (2005, 204-208), qualitative study researchers exquisitely become deluged by the huge amount of data. Qualitative data gathered in several methods has to be interpreted to become information. When analyzing the gathered data the focus should be in comparison and discussion between the theoretical framework and empirical findings. (Ghauri & Gronhaug 2005, 204-208.)

According to Vaughan (2001, 75), chi-square test is a statistical test widely used to observe relationships between two variables with expected and observed data according to a specific hypothesis. Vaughan states that chi-square test is the most useful test when analyzing data from surveys. The combination of simplicity and applicability to general situations the chi-square tests is the most understandable among all the statistical tests. (Vaughan 2001, 75.)

All statistical hypotheses are formed of two elements, a null hypothesis and an alternative hypothesis. These hypotheses, null and alternative, are formatted in a way that either the null hypothesis or the alternative hypothesis is true but not both. When testing hypotheses, the researcher supposes that the null hypothesis is true. The null hypothesis is going to be either rejected or not by the researcher depending on the examined data. If the data examined seems to be significantly in opposition to the null hypothesis, the researcher has to reject the null hypothesis. Consequently the alternative hypothesis can be accepted. (Black 2009, 334.)

In this research, chi-square testing is used to test the null hypothesis  $H_0$ : There is no association between the type of employee ranking and the own engagement level. The alternative hypothesis  $H_a$  is stated as: There is a connection between type of employee ranking and the own engagement level.

The analysis of qualitative data differs from statistical analysis because the data does not exist in a form of numbers. In this thesis the analysis of different sources of data gathered from interviews and surveys has its foundation on general inductive analytical procedure and in statistical chi-square tests.



## 4 LITERATURE REVIEW

This part of the thesis examines the existing literature and theories which are prevalent with substantial changes in organizations as OK1 continuous improvement program has been in Outokumpu.

### 4.1 Organizational Change/ Leading Change Management

*“Learning to manage change is a skill we all need to acquire, improve, and master-in all aspects of our lives. “, Ann Salerno & Lillie Brock.*

Why do so many change programs fail?

Brenner (2008, 132-137) explains that the failure rate of change programs swings between 50 and 75 percent due to two reasons. According to Brenner (2008, 132 – 137), one reason for failure is wasted confidence in the power of the cognitive i.e. the capability to persuade by rational opinions. The second failure reason is psychological barrier. These failure reasons are inevitable human defenses which becomes apparent whenever somebody or something alters the status quo for an entity or an organization. Brenner (2008, 132-137) describes how the human factor applied to the principles of change management is crucial for any organization. Brenner states that psychological consequences are all too often neglected or ignored. Executive management easily perceives that it can mandate change with the steep force of logic. Managers stating their mission, core values and vision with hollow words are reducing an emotional commitment because leadership has not realized how to psychologically join the entire organization with them. Whenever organizational change could have been executed successfully, it should inspire employees and get them to trust in themselves and in one other and especially to enterprise’s vision, values and strategy. Brenner writes whenever an organization is aiming to get better results to achieve organizational vision, it should crystallize its operation as: “Profitability concerns performance and performance concerns people – one person at a time and collectively”. For change masters it is inevitable to deploy the collective energy of the organization and generate complex and challenging change solutions. (Brenner 2008, 132 – 137.)

Savolainen (2007, 3-6) states that there are six substantial aspects which enable successful change execution such as generating readiness for change, motivating people to accept change and sustaining momentum. The factors Savolainen (2007, 3-6) notes are planning and scheduling, commitment, roles and responsibilities, communication, resources and motivation and involvement. She raises the importance of accurate and relevant information given to employees to decrease change resistance and also contribute their willingness to change implementation and to be involved in the change. Savolainen (2007, 3-6) highlights the importance of two-way and face-to-face communication styles and considers them as the key components on the way to succeeded change implementation. Two-way communication enables interaction among superiors and subordinates. Savolainen (2007, 3-6) imparts how important the feedback of subordinates' is before the change implementation of change plans and scheduling are to be executed. (Savolainen 2007, 3-6.)

Smith and Graetz (2011, 3-4) impart how traditional change is assumed to be done by enchantment leadership attitude, where the focal point is on accountability and control with the need to eradicate counterarguments and uncertainty to secure success. Smith and Graetz (2011, 3-4) pass on how change management, with new leaders of twenty-first-century, is having more humanistic perspective. Leader with new participatory style is transformed from autocrat do democrat. This kind of a leader can admit that organizational understanding and expertise do not exist only within senior management. New leader can energize and impact all organizational levels by reviving the creativity of lying dormant. When executing change, organizational leaders should try to challenge status quo, encourage creativity and some risk taking and contribute information sharing and team work. Despite of lofty methods changes often retain traditional way of leading where leaders hold sovereignty by charismatic degree. Traditional orthodoxy necessitates the significances of discipline, order and control from the top down. The opportunity to execute change the bottom up without the advantage of a leader does not cross the threshold. Leaders making change management decisions appears to make either or choices e.g. my way or highway, or compromise between alleged opposites such as innovation and effectiveness, teamwork and rivalry, freedom and accountability, empowerment and leadership and as well economic and social goals. (Smith & Graetz 2011, 3-4.)

Organizations can be excruciating and multifaceted where employees are having emotions and irrational factors against changes. A leader-centric approach to organizational change and development represents only one view how to manage change. By doing organizational change with a classical top-down leader centric model, organizations give an impression of charismatic leaders and how functions are shaped by strong hands. Organizational change done by top-down model affects employees and it gives leaders an illusion of control but the meaning dismisses complexity. Managers executing changes with top-down model are presumed to set performance targets more important than direction. They lack tolerance for ambiguity and oppose. (Smith & Graetz 2011, 4-5.)

#### 4.1.1 The Scale of Change

Alvesson & Sveningsson (2008, 16) characterizes changes in to two extremes as evolutionary or revolutionary. Evolutionary changes can be interpreted as operational changes affecting part of the organization. Evolutionary changes use the current strategy and culture organization has. Revolutionary change is a more radical change affecting several organization proportions at the same time. It has an impact to organizational culture, organizational formation, management control systems, reward practice and leadership. Trait of the revolutionary change is the limited time of it occurs and therefore revolutionary change is sometimes named as discontinuous change. Evolutionary changes can be seen occurring by degrees in small quantities in a longer period of time. (Alvesson & Sveningsson 2008, 16.)

In this research it is somewhat adequate to concentrate on culture and on people as part of examples. Table 1 shows how Plunkett, Allen and Attner (2011, 264) describes their perceptions of evolutionary and revolutionary changes. In the case of evolutionary change employees intend to relate more positive to changes and they aim to see brighter future as well as be more open for communications. Culture values are nurtured. In the case of revolutionary change employees are lacking morale and communications turn into more sporadic. Future looks uncertain for employees. Culture values are bypassed and organizations focus on cost cuttings. (Plunkett et al. 2011, 264.)

**Table 1.** Examples of evolutionary and revolutionary changes

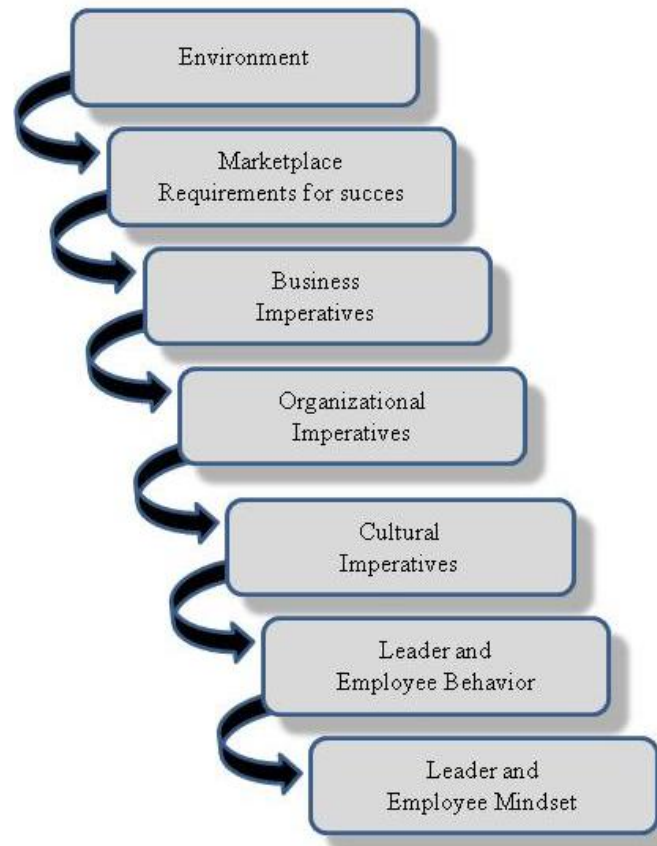
FACTORS	EVOLUTIONARY CHANGE	REVOLUTIONARY CHANGE s
Time Period	Longer	Shorter
Strategy	Strategy refocused on core business Noncore business sold	Strategy focused on downsizing; Older plants closed; Jobs eliminated
Structure	New unit created; Reorganize several units into one unit; Experienced managers hired to lead new unit	Large percentage of headquarters staff eliminated; Large percentage of management eliminated; Many nonmanagerial employees eliminated
Culture	Core values identified; Culture reshaped to stress, accountability, quality and cycle time	Organization focused on cost cutting; Cultural change bypassed
People	Morale positive, future bright, communication open	Morale negative, future uncertain, communication sporadic
Finance	Debt reduced by sale of noncore business	Debt eliminated by the streamlining of operations and the selling of assets

#### 4.1.2 Drivers of Change

*“There is nothing permanent except change”, Heraclitus.*

Today’s organizations need to change in means to sustain their competitiveness and to survive in the long run. Triggers for change often are difficult to foresee and organizations should respond to emerging changes even before demands for change are fully arose in the market. For existing organizations, especially for large and most powerful organizations, it is not easy to change their strategies and structures sharply enough to keep up with the requirements of changing surroundings. For this reason to understand the need of the change is crucial for organizations. (Zimmerman 2011, 1.)

Anderson, Ackerman and Anderson (2010, 17- 19) have created a model that clarifies the drivers of change. Figure 1 illustrates consist of seven drivers with four traditionally familiar to managers and three quite new ones. It is a sequence where one change triggers the next and which in turn triggers the next etc.



**Figure 1.** The drivers of change model

Anderson et al. (2010, 17 - 19) discuss that external drivers – environment, marketplace, business and organization – are more familiar to managers and leaders while the last three more internal and personal drivers – culture, behavior and mindset – should be equally important. They state that organizations where leaders are not taking care of people components such as culture, behavior and mindset, are somewhat struggling with transformation of change fundamentals. (Anderson et al. 2010, 17 - 19.)

#### 4.1.3 Managing Changes in Context of National Cultures

Hofstede, Hofstede and Minkov (2010, 46-47) discuss how organizational corporate cultures were very popular in topics in the management literature in 1980's. They state even in modern times when generation cultures differ from class cultures as social classes, gender cultures, religious cultures and organizational cultures it is obvious that organization cultures differ between nations. (Hofstede et al. 2010, 46-47.)

Savolainen (2007, 4) has shown how global organization's local change implementations have impact of national culture. That means when doing change implementations in global companies it is important to understand different national cultures. Savolainen (2007, 4) states that people representing local values of the national culture, creates their perspective of life. People use these values and beliefs in their working place. This phenomenon clarifies if similar activities executed in company's different national units are succeeded in a different way depending on the country and national culture. (Savolainen 2007, 4.)

Henry (2008, 361) argue how important it is for leaders to understand national cultures, when they are managing multinational organizations. The benefits of a valuation of national cultures should not be downplayed. When implementing strategic change it would be supportive if leaders would pay more appreciation to cultures. By understanding the culture and its effects to employee behavior, leaders could develop suitable reward and control systems to serve dissimilar cultures in different SBUs in different countries. (Henry 2008, 361.)

#### 4.2 Employee Engagement

Cook (2008, 3) states that employee engagement can be defined as a passion and energy employees can offer their best to the organization. Engaged employee is eager and able to give sustained effort to the organization he or she contributes. Engaged employees rely on what the organization stands for and are committed to it. They are eager to serve organization more than is expected of them. Engaged employees care for the company's future and they can do personal offerings to see that the organization succeeds. Cook summarizes the employee engagement: "it is about the degree to which employees perform their role in a positive and proactive manner". (Cook 2008, 3.)

Benefits for better employee engagement by improving conditions where employees are capable to provide their best, can be seen as improved efficiency and boosted passion for and commitment to the vision, strategy and goals of the organization. By investing in better employee engagement employees intend to have a greater alignment to the organization values, greater sense of team and higher levels of creativity and they are going to be additional innovative. Better employee engagement is going to increase loyalty to the organization and employees are going to be better brand ambassadors.

When prolonging the evolution of employee engagement companies are going to have a boosted business growth and sustained long term success. (Cook 2008, 21-22.)

Employee engagement can be seen related with the state of the organizational climate with or without change and it links to change management because more engaged employees are going to be better prepared to change execution and see the change in positive manner. The higher the rate of employee engagement the higher the rates of readiness for organizational changes are going to be because employees' responses intend to be more confident and less negative. In organizational climates with less engaged employees the resistance of change may be related to e.g. criticism and these negative factors can jeopardize and contaminate the change management process. (Balogun & Hope Hailey & Johnson, 2008, 252.) Balogun et al. (2008, 252) states that engagement itself operates in three levels: the emotional-, the physical- and the cognitive level. Emotionally engaged employees are very involved with one's work, cognitively engaged employees are paying an attention to hard focusing while at work and physically engaged employees are inclined to "go the extra mile". According to Balogun et al. (2008, 252), engagement has a further significant characteristic which is the product of a complementary relationship between employer and employee. Complementary relationship bears the idea that employees, in exchange for their giving of full engagement to company can expect to get something similar back from the employer. In this point it is worth noticing that Balogun et al. (2008, 252) emphasizes how the old psychological contract of "a job for life" in return of employee's full engagement to organization and company, has broken down. Reduced expectations of complementary relationship, has guided employees to bear smaller commitment to their work and organization. (Balogun et al. 2008, 252.)

#### 4.3 Leadership and Communication

According to Cook (2008, 187), senior managers play a significant role in engagement in any organization. What they say and do is crucial when driving higher stages of employment engagement. This is because employees would like to be treated purposefully to know what the organization stands for and where it is aiming at. Communicating a clear vision of the future is one of the most significant factors that senior managers can influence. An undeniable vision of the future alongside with a distinctly informed strategy forms a common goal in organizations where employees

can be committed and engaged. Cook (2008, 187) states that it is important that senior management team not only pretend to deem the significance of engagement. Their role model behavior should expedite engagement. The style of the leadership that is expressed by senior managers has its influence on the behavior of managers and leaders throughout organizations. Vision, strategy and values that the organization has are driven by the leadership. (Cook 2008, 187.)

When leading a change leaders' approach to subject is fundamental. Everything is shaped by awareness of leaders. Their experience, capability and outcome have an impact on the outcome of the transformation or change. Their outcome is a mixture of emotional responses and individual ability to change. Leaders with more conscious awareness for change can contribute to the employee commitment and therefore decrease change resistance. Leaders with the limited awareness approach transformation with conditioned habits, existing knowledge and dominant leadership style. They are biased and they are having assumptions of mental conditioning which causes inability to see critics and process dynamics. Leaders with limitations cannot know what they do not know. To become a successful leader within transformation, leaders with the limited awareness have to change themselves first. Limited awareness leading approach has been a prevalent and the new conscious approach of leading is becoming more apparent in today's organizations. The expanded awareness or conscious leading to see subtle human and process dynamics at play has become a key driver of success for organizations. To transform organizations successfully and achieve breakthrough results, the level of leadership awareness is most important. (Anderson et al. 2010, 81-83.)

Good management brings a degree of order and consistency to the quality and profitability of products or services. Leadership by contrast is about vision, big picture views and coping with change. Good management brings calmness and stability to an organization and tries to eliminate what sometimes can be chaotic circumstances that threaten their very existence. (Bertocci 2009, 11-12.) According to Finney (2008, 26-27), management does not mean finding a right or wrong but management is largely to adapt. This means that to be a good manager or a leader, both have to turn and to integrate their own expectations to employees' own behaviors and characteristics. Finney (2008, 32) states that statistics show if an employee is quitting his or her job, it is mostly the result of dissatisfaction with their direct supervisor. Managers as well as



leaders cannot force employees to stay but they should start to understand how to give reasons to employees to stay. (Finney 2008, 26-32.)

Mader-Clark (2008, 155-157) argues that the core of good management is good communication. Good managers are prone to understand their employees and employees are in need to know what managers expect them to do to in order to meet those expectations. Communication is a hard work and it has to be nurtured with the managerial focus and discipline. (Mader-Clark 2008, 155-157.) Gildenhuis (2004, 204) argues that “communication is a transfer and understanding of a message”. This means that the message has to be forwarded in an understandable form to enable receiver of the message to understand it. According to Gildenhuis (2008, 205), communication consists of two channels of expressive traits. The first channel is a vertical top-down and bottom up channel. The second channel is a horizontal or lateral two-way channel. The vertical top-down channel can be considered as an instruction line where communication is transferred from top down to the floor level of the hierarchy. The vertical bottom-up channel can be considered as a feedback line where communication follows the identical route through hierarchy from the bottom to the top. The horizontal two-way channel contributes communication as a lateral information line between departments, divisions of departments or parts of divisions on the identical hierarchical layer. (Gildenhuis 2004, 204-205.)

According to Gildenhuis (2004, 205), lateral communication is repeatedly neglected. As communication is dealing with humans, perfect communication is not always viable. The effectiveness of communication lacks because of barriers. Gildenhuis (2008, 205) can see physical, personal, semantic and cultural barriers to the transference of messages. Physical barriers consist of e.g. physical distance between people and because the message has to pass many levels of hierarchy, the distortion of the message is inevitable. Personal barriers are concerning human emotions. People can occasionally apply their personal values to what they hear and read, instead of rational and objective assimilation of what is being said, or they can understand the message to be other than it was mentioned to be. Finally, the receiver understands what he or she wants to understand. Because the information often has to pass many levels of hierarchy and it is going to be handled by humans with different values, the information becomes distorted and this phenomenon is a serious problem to many managers. Gildenhuis (2004, 206) states that semantic barriers in communication exist because of poor choices of

symbols or ignorance of unspoken allusions. Cultural barriers are often related to language barriers but are actually misunderstandings for same words and phrases because of senders' and receivers' different cultural backgrounds. Gildenhuis (2004, 206) states "The key element to successful communications is feedback". The right utilization of feedback enhances the communication process and decreases differences between the instruction, information or idea received - understood and the one intended. Nevertheless, one of the most important communication skills is listening. Good administrators as well as good managers are good listeners and effective communicators. (Gildenhuis 2004, 204-207.)

#### 4.4 Vision and Sustainable Organizational Change

According to Henry (2008, 11), a vision symbolizes a desired state which the organization is trying to achieve in the future. A vision does not change over time as goals and objectives do. A vision must fit to an employee's personal goals and values in order to employees' vision internalizing possible. When a vision bears a sheer connection to reality, employees intend to ignore their organization's problems and capabilities. If employees see a credibility gap between a manager's rhetoric and actions, a vision is going to be rejected. To generate a good vision, great intelligence is not needed but imagination, intuition and an ability to combine different information. (Henry 2008, 11.)

A strong vision of the future engages and inspires employees just by showing to them the expedition that they are taking. By having a vision a company shows to its employees where to stretch. Good visions are memorable, meaningful and inspirational. A vision creates a picture to employees of a future state to which the organization is attempting. A successful vision communicates to employees. (Cook 2008, 120 – 122.) A vision should be intelligible and attractive to customers, shareholders and especially to employees. Essentially the vision should translate business basics to employees by answering them: "where is all of this headed?" and "why should I be part of it?" By communicating a vision to employees, companies and organizations are giving signals to employees, what is going to be changed in terms of the new organization values. (Daniel & Metcalf 2001, 68.)

Schneider, Brief and Guzzo (1996, 3) introduces how total organizational change can be implemented in a sustainable way. Organizational climate and culture are interconnected and employees' values and beliefs are part of the organizational culture which in turn affects their understanding of organizational policies, practices and procedures. (Schneider et al. 1996, 3.) Schneider et al. (1996, 15) discuss how different techniques sustain the total organizational change and they purport that different total organizational change techniques aspire to be beneficial whenever they send a strong, tangible message to employees. Strong message imparts to employees a new vision of the organization and the way in which the organization plans to change the way it functions. After all, employees are the first ones who have to rely on their company vision. (Schneider et al. 1996, 15.)

Schneider et al. (1996, 6) propose that because any culture is difficult to change, it should be changed through a focus on working climate. Climate at work reflects themes that produce culture. To make a change and sustain it, only by changing everyday policies, practices, procedures and routines, employee beliefs and values can be guided. To communicate new beliefs and values to employees, tangible changes are required. (Schneider et al. 1996, 6.) Schneider et al. (1996, 14) argue that to achieve success in sustainable total organizational change, the key to success lies in top management team's ability to deliver a strong vision and show their commitment to its goals. Without a full understanding and commitment of middle managers and supervisors, the total organizational change is not going to be successful. The goals where the vision and total organizational changes aim at should be congruent with the goals that middle managers and supervisors have. Conflicts between team goals and organizational goals increase resistance towards organizational change. Groups at lower levels of organizations attach to new practices if the shared meaning of the vision makes sense to them. Through employees' interaction and shared interpretations, they form understanding concerning the organization and what is crucial for it. The climate to sustain the implemented change is constituted of these perceptions employees have. All groups and levels of the organization need to be managed with sustainable total organizational change. (Schneider et al. 1996, 14.)

According to Schneider et al. (1996, 14-15), the main aspect of managing groups is communicating to groups, employing people for groups, socializing and schooling in groups, rewarding group success and allocating supplies to groups. All in all it is

nurturing groups. Groups are the glue to holding change efforts together. Schneider et al. (1996, 16) describe that intensive organization can take place when new climates and cultures are generated and nurtured. To achieve sustained change both climate and culture have to be affected. (Schneider et al. 1996, 14 - 16.)

To highlight the importance of the change of climate and culture Schneider et al. (1996, 7) introduce an approach as silver bullet. Total organizational change stands in sharp contrast to the silver bullet approaches such as: new personnel strategies, new training programs, new pay and compensation programs, job enrichment and team building. The silver bullet strategies are never going to get executed entirely in organizations because the change is too narrow in perspective. It only generates an insufficient momentum to redirect employee's energies and competencies hence employees aspire stick to familiar and comfortable manners from past. (Schneider et al. 1996, 7.)

#### 4.5 Literature Conclusion

Literature review represents a brief crosscut of theories that are affecting to phenomenon such as employee engagement and change management, this research explores. These theories aims to provide an understandable picture of issues that are relevant and important for this research. In addition this review presents functions that may be important even in other research areas such as employee satisfaction, communication and listening skills.

The sub chapter of organizational change/ leading change management points out the significances which companies and managers needs to consider whenever a successful change is going to be executed. In terms of consistency, Outokumpu's continuous improvement program and organizational change belong together and in the execution of it, the change is the most determinative issue.

The sub chapter, the scale of change opens up an opportunity to understand, what kind of a change Outokumpu's OK1 continuous improvement program was? If OK1 was an evolutionary change, it should have been executed by degrees in small quantities in a longer period of time. If it was a revolutionary change, its tools and routes should have been executed with radical changes by affecting several organization proportions at the same time.

The sub chapter, drivers of change, explains issues that need to be taken into account when changes are to be triggered. Anderson et al. (2010, 17-19) set out the possibility to compare later on if Outokumpu managers noticed personal components as culture, behavior and mindset, during the execution of OK1.

The sub chapter of managing changes in context of national cultures shows the importance of understanding the national culture when global companies such as Outokumpu is, are executing e.g. identical programs as OK1 in different national cultures. It shows that employee rewarding systems, as even Outokumpu had for OK1 in Tornio, should be adjusted after cultures in different nations. Cultural impacts between nations are issues that can be important for Outokumpu and to any other international companies in general because of the globalization.

The sub chapter of employee engagement highlights employee engagement as a device that enhances or strengthens organizational goals to be achieved. Issues written in this chapter are important in a meaning to portray an image of employee engagement and are to be announced in terms of consistency for this thesis.

The sub chapter of leadership and communication illuminates some leadership determinants that can be advantageous to managers, who are leading the change in organizations. The role of leadership is significant whatever changes are to be made. Changes do not happen immediately but can be very stressful and sensed ominous for employees in every level of organizations. This in turn can trigger negative effects in employees such as change resistance, bad engagement to work, smaller loyalty to employer etc. which enlightened leaders in turn could decrease. Top-down, bottom-up and lateral communication practices should be key determinants for a good management whenever managers want to succeed with their work.

The sub chapter of vision and sustainable organizational change gives the certainty of how vision plays a significant role in employee engagement. By nurturing and changing working climate, changes in organizations can be additionally sustainable. These findings this chapter points are opening up possibilities to wonder how realistic the vision of Outokumpu's continuous improvement program was and if OK1 was changing working culture in Outokumpu?

One significant finding in the literature review is the notion that vision of the programs within organizations, have a grand effect to sustainable organizational change. This in turn should give a good theoretical starting point to build up a consolidative continuous improvement program in Outokumpu's different SBUs as well as in its different national organizations. Furthermore it is meaningful to find out how sustainable cultural change in organizations could be achieved with a fair change of the working climate. The theory of how working climate change effects to working culture should heave up some opinions in Outokumpu's management teams.

In addition it is worth noticing that this review is not expressing any direct change management ideas written by the change management guru Kotter (1996, 21), but it tries to show some congruent theories to his manifests in a different point of view. Additionally, based on the researcher's own experience and observation in the case company, Kotter's (1996, 21) 8 steps change model has already been widely used in Outokumpu and therefore some other manner of approaches and ideologies would be broadening and advantageous to subjects of this thesis.

## 5 EMPIRICAL FINDINGS AND ANALYSIS

OK1-surveys, managerial interviews as well as the analysis which compares the findings with the theories written in chapter four, are dealt with in this chapter. The subchapters this chapter presents are built up in the way that the interview and survey findings support the research questions and the main results can be delivered. The subchapter validity of findings in this connection justifies the importance of the findings from the interviews and the survey questions.

The qualitative data of the findings in this section are presented in order that the amount of unadulterated and published data clears the reliability and validity of the findings and which in turn decrease the author's bias to the conclusions. The quantitative data findings, this research examines, are not presented separately in the chapter of findings. As quantitative findings can be shown directly in a table, the quantitative data findings are presented as supportive data in the analysis section. The quantitative data from the surveys, represents samples of Outokumpu population working in Tornio Finland, Torshälla Sweden and Sheffield England. The quantitative part of this research tests the following hypothesis: There is no association between the type of employee ranking and the own engagement level towards OK1.

The first part of the research was to execute Tornio surveys with the aid of Outokumpu Tornio intranet and Outokumpu employee's computers. During the survey execution it became evident that every one of screened survey participants could not reply the survey because of their lacking permissions and connections to Outokumpu's intranet. Therefore considerable amount of survey responses were gathered manually in paper form and later on manually shifted to excel- form. Surveys in England and in Sweden were executed with the aid of the author's colleagues in Torshälla and Sheffield via email. Survey results from Swedes and Britons were gathered in paper form where from they were manually transferred to excel- form. Survey questions are shown in Appendix 2.

The second part of the research was to execute interviews of five top managers in Tornio using interview questions that are shown in Appendix 1. The chosen interviewing method was a general interview approach where conversation issues were designed to support the theme of the research and general issues of continuous

improvement in Outokumpu. The responses were reduced from recordings and written notes to compact the suitable issues. The reduction of responses was intentionally small with a purpose to minimize author's bias to the research.

**Table 2.** Interviewees and screened survey participants

Tornio SBU Executive Vice President

Tornio SBU Vice President, Business Excellence	Interviewed
Tornio SBU Vice President, Operational Excellence	Interviewed
Tornio SBU Vice President, Production excellence	Interviewed
Tornio SBU General Manager, Production excellence	Interviewed
Tornio SBU General Manager, Production excellence	Interviewed

Tornio white-collar  
employees

Section managers  
Team leaders  
Foremen  
Surveys/ Replies 50/24

Torshälla white-collar  
employees

Section managers  
Team leaders  
Foremen  
Surveys/ Replies 20/8

Sheffield white-collar  
employees

Section managers  
Team leaders  
Foremen  
Surveys/ Replies 20/5

Tornio blue-collar  
employees

Production line operators  
Janitors  
Machinists  
Electricians  
Surveys/ Replies 50/31

Torshälla blue-collar  
employees

Production line operators  
Janitors  
Machinists  
Electricians  
Surveys/ Replies 20/8

Sheffield blue-collar  
employees

Production line operators  
Janitors  
Machinists  
Electricians  
Surveys/ Replies 20/0

All interviewees were top managers right below the executive vice president of Outokumpu Tornio and the selection of them was made in a purpose to give a managerial perspective for this study. All interviewees had had a role with the Outokumpu's OK1 execution in their own specific areas. The interview questions were not designed to find an answer to the research question number 1, what is the current situation of employee engagement in Outokumpu's continuous improvement program? The interview questions were planned to get supplementary background to the research



question 2, Why do motivation problems, if any, emerge in Outokumpu's continuous improvement program?, as well as to the research question number 3, How can employee engagement be increased in Outokumpu's continuous improvement program in the near future?

The qualitative data, gathered from OK1-surveys, was mentioned to get employees visions of what issues matters with their motivation and engagement in Outokumpu's continuous improvement program. The qualitative data from the survey responses tried to find an answer to the research question number 1, what is the current situation of employee engagement in Outokumpu's continuous improvement program?

Surveys in Tornio were conducted for 100 employees wherefrom 55 employees responded. 24 of answerers were white-collar employees and 31 were blue-collar employees. Surveys in Torshälla and Sheffield were conducted for 40 employees/ site wherefrom 16 Torshälla and 5 Sheffield employees responded to the survey. Swedish respondents were divided even as 8 blue-collar and 8 and white-collar employees. English survey participants were all white-collar employees. The respondent rates were 55% in Tornio, 40% in Torshälla and 12, 5% in Sheffield.

## 5.1 Current Situation in Continuous Improvement Program

### 5.1.1 Employee Engagement in Tornio

According to the survey answers, totally unengaged Tornio employees expressed their frustration towards OK1 program because of the methods and tools in OK1 activities were old fashioned. They related the view that there was some lack of engagement from the administration level. Unengaged employees in Tornio stated how OK1 program was lacking top-down communication and transparency. To achieve meaningful continuous improvement program, unengaged employees had wishes how leaders should pay more attention to operative level employees by listening them closely. According to these employees, Tornio site managers should be additionally open to top-down discussions with their employees. Tornio employees who expressed their engagement to be none or smaller towards OK1 program, were not highly keen to participate in cleanness and orderliness (5S) activities because they wanted the cleaning to be done immediately instead of the current 12 weeks. Based on the authors experience in OK1 projects, 12

weeks' timeframe is the time that OK1 5S- method, 4 hours / week, generally takes time. 5S activities are part of the OK1 AM-pillar which is explained in the chapter 2. The planning of cleaning and orderliness made by several people and in several weeks was seen as immature by the unengaged employees. The employees who expressed to have some engagement towards the OK1 reported that the program was too complicated and the similar improvements as were achieved with the OK1 could have been done within a shorter time by conventional manners. A few employees who expressed smaller engagement in Tornio indicated that during the OK1 activities the amount of ongoing projects was too significant and projects for OK1 were to an extent made up. According to the managerial interviews, expounded later on, the interviewed Tornio managers had identical convergent opinions as the employees in Tornio who chose the option of smaller engagement.

Among the employees who stated to have temperate and plentiful engagement in Tornio, the most dominant feature with their engagement driver was black and white thinking without any visible criticism. These employees stated that they were engaged because it was a part of their jobs. They encountered OK1 tasks as a given job and therefore they had to do it properly and obey. This kind of a behavior can be related to expression of Lutheran working moral. Lutheran working moral states a worker who is hard-working and takes his or her work as a mission. (Heinimäki 2008, 66). According to (Swedberg 2005, 310), it can even be assimilated to Max Weber's idea of protestant work ethics, without any further aspiration to employees increased profit. The employees with temperate and plentiful engagement had passion towards the OK1 because they could envision improvements in their jobs. Even though these employees experienced some lighter engagement from their superiors and managers, they could find other issues to gain their own engagement. During the OK1 actions in Tornio some engaged employees indicated that autonomous management AM and cleanness and orderliness 5S operations were popular because of their concrete work and tangible results. Concrete results made by OK1 activities increased engagement among engaged Tornio employees. OK1 fee paid after OK1 projects increased engagement to some extent amongst a few engaged employees. The employees, who expressed themselves to have temperate and plentiful engagement towards OK1 were aiming to get reliefs to their daily job with less errors, wastes and improved working conditions. Their engagement was affected by the concrete results which improved their own working place. Employees in Tornio, who announced to have temperate and plentiful

engagement towards OK1, had had some successful project-issues which could tackle irritating problems and they expressed themselves that they were fascinated by the systematic manner of an approach how the program rejects problems. By being able to choose a good project subject with tangible and succeeded results, these employees could strengthen their engagement to OK1 activities. A few engaged employees let know that they were participants in the steering group of OK1 and therefore they had to act as engaged persons. Other subjects gaining the engagement amongst these employees were belief in OK1, salary raise, personal development, team work and curiousness.

### 5.1.2 Employee Engagement in Torshälla

According to the survey responses from Torshälla Sweden employees who stated to have none or smaller engagement, the OK1 program was too heavy and time consuming. They stated that paperwork with increased bureaucracy caused their diminished engagement towards the OK1 program. These employees stated that the activities made with OK1 tools should already have been included in their job descriptions. They announced that some smaller engagement was originated from leadership manners. According to employee expressions OK1 consults with their pre-designed tools and demands decreased their engagement and they pointed out that the OK1 consulting company's standards of activity were forced to be followed too excessively. These employees who stated to have none or smaller engagement, expressed that Outokumpu's OK1 program in Torshälla was launched badly. The understanding of program and tools in organizations was missing and these employees indicated that they were separated into two sects: Sects as those who relied on OK1 were insiders and those who did not were outsiders and unfaithful. A few Swedish employees with smaller engagement announced that the prevalent amount of teams and projects caused some disappointment and therefore it decreased their engagement. Swedish employees who responded to have a smaller engagement towards the OK1, had some black and white views without any visible criticism where given tasks had to be executed no matter what, which can be assimilated to Lutheran working moral. Lutheran working moral imply to a worker who is industrious and experiences his or her work as a mission. (Heinimäki 2008, 66).

The employees in Torshälla who expressed to have temperate and plentiful engagement could see possibilities to improve their jobs, manners, processes, machinery and productivity. They expressed the demand for better products and the demand for improvements in factory processes. These employees expressed their opinion as Outokumpu's OK1-vision was stated properly. The prevalent fingerprint of Swedish engaged employees was the essential need of OK1 and continuous improvement evolution in Outokumpu. The OK1 program and its activities were seen helpful and interesting because the employees who expressed to have temperate and plentiful engagement could foresee project steps and results with the aid of OK1 tools. Unfortunately the amount of projects instead of the quality of achieved results was seen as an unsatisfactory feature in OK1 amongst these employees. Some employees who expressed to have temperate and plentiful engagement towards OK1 stated how OK1 was started badly and it was all too heavy and bureaucratic to obtain its goals. Among these employees there was also some black and white thinking without any visible criticism where given tasks had to be executed no matter what. This kind of behavior can be called Lutheran working moral. Lutheran working moral portray a worker who works assiduous and sees his or her work as a mission. (Heinimäki 2008, 66).

### 5.1.3 Employee Engagement in Sheffield

Even though all employees in Sheffield stated they were highly engaged towards the OK1 program, they could find some negative issues which were affecting their vision of the OK1 program and which were worth of reporting in their survey responses. According to the Sheffield employees, the OK1 was badly implemented in Sheffield. They expressed themselves that the OK1 in Sheffield was too bureaucratic in its paperwork and that put people off being involved. According to the Sheffield employees, the OK1 with its processes and practices were seen active as long as the personnel in Sheffield understood what they were doing. In the survey responses from five Sheffield employees, team work and collective problem solving as well as the production excellence change agent training (Pecat) were emphasized to be very significant features and which in turn were affecting the employee engagement in Sheffield. The employees in Sheffield expressed that the highest passions towards the OK1 activities were related to pillars, supporting teams, leading projects and Pecat participation. Pillars are explained in chapter 2.

## 5.2 Managerial Opinions of Outokumpu's OK1 Program

Before Outokumpu's continuous improvement program OK1 was launched in 2005, four of five interviewed top managers in Outokumpu Tornio recalled that they did not have any thorough discussions concerning the OK1 program amongst their colleagues at the top management level. They expressed their opinions as they were not informed appropriately concerning the OK1 program and therefore it caused some mistrust against it already in the beginning. The managers were concerned for the program due to the reason that they had preliminary appraisal how the program would create costs and therefore it would be against the savings program (FC-Hunt) which was ongoing whilst that moment. Some interviewed managers in Tornio expressed how they had had a premonition that the OK1 program would cause additional bureaucracy and there was also a dread that OK1 would be against all improvements already made in the Tornio site. Only one top manager of the five interviewed managers had had discussions of the OK1-program with his foremen and production employees before its execution. It is worth noticing that these discussions were executed as two-way top-down communication between one manager and his subordinates but not among other managers, i.e. lateral communication line was missing.

The OK1 consulting company in Outokumpu had significant role in the OK1 execution and its very first launching. The majority of the interviewed managers had congruent opinion that most of the OK1 consulting company's consults were professionals although the OK1 consulting company utilized some of its employees with a lighter competence. Some managers interviewed experienced that few OK1 consulting company's employees with the lack of validity were studying Outokumpu's continuous improvement program in general to an extent while they were working as consults in the Tornio site. This caused some decreased trustworthiness against the OK1 consulting company amongst these managers. According to one interviewed manager, it would have been better if the OK1 consulting company would have been left in backgrounds whilst Outokumpu's own people would have been trainers for the OK1 program and its tools. One strong managerial opinion was stated as the OK1 consulting company consulting action was a big bluff. According to this manager, the formality of the OK1 consulting company's program and tools were fine but the turnout of them did not bear fruit. He continued: "There could have been some succeeding but most of the activity

had to be spent on documentation and reporting results of projects”. This statement is convergent to employee responses.

Three interviewed managers of five announced that they were cautious towards the OK1 program with some fascinated and curious compassion but still without any bigger reactions towards it. Two of five interviewed managers expressed themselves to be familiar with the OK1 program and they had some educational and experiential background to the subject of operational excellence. These managers stated that they could adopt Outokumpu’s OK1 program easily without any wondrous suspicions. They had seen and observed different kind of continuous improvement programs kindred to the OK1 in other companies in other countries.

In the early state of the OK1 program execution, one interviewed manager sensed instinctively that the program was a given model as *“my way or highway”*, and according to his statement, the way how the OK1 was executed, it was not increasing his or the others commitment towards the OK1. He stated his opinion how the OK1 program was an illusion from the highest administration team in Outokumpu and as Outokumpu’s administration team was having a fiction that this kind of model should work. He expressed how the upper hierarchy of the OK1 organization suffered the lack of communication from above as well as from other OK1 colleagues and that may have caused insufficient commitment to the program through the whole organization chain.

Outokumpu Tornio site managers compared their present OK1 knowledgement with their first reactions of the OK1 and they all trended identical. By having some years experience of executing the OK1 program in Outokumpu, the top managers of Tornio had expanded their awareness and realized the entirety of the program. All interviewed top managers expressed their opinions that they would have preferred a smaller start of the OK1 by focusing on its autonomous management AM and cleanness and orderliness 5S functions. The managers of Tornio site recalled the weakened engagement towards the OK1 program may have been caused due to the reason that the start of the program was too wide. Some of the managers recollected disappointments when rapid profits, promised in the program declaration, were not actualized. Some of the interviewed managers anticipated that OK1 activities were not succeeded in the scope of its extents. Additionally some interviewed managers had opinions that the project tools and the OK1 program designed by the OK1 consulting company were exploited with

specialized tags and explanations which could only be interpreted by specialists and that kind of specialization should not be allowed in the future. One strong managerial opinion of OK1 and its overall activities in Tornio was stated as follows:

*“It is not overly good to follow proclamations too formally which are done by strangers and forget values of your own.”*

### 5.3 Managerial Views to Develop Continuous Improvement

The majority of five interviewed managers pointed out how Outokumpu could have big potential to build up further its own continuous improvement program. According to these managers, the forthcoming success of Outokumpu is depending on e.g. Outokumpu employees themselves, their know-how and especially how Outokumpu can utilize and develop future's continuous improvement program. All the interviewed managers stated that Outokumpu cannot afford to be without its continuous improvement program.

To achieve a better continuous improvement program for Outokumpu in the future, coherent opinions amidst the managers come up as follows. All the interviewed managers had a prominent wish as any consultancy from the OK1 consulting company would not be desirable for the Outokumpu's forthcoming continuous improvement program. According to all managers interviewed, continuous improvement in Outokumpu should be a consciousness manner of an approach to the work and customized to the daily action and therefore regular work and continuous improvement should be merged together.

A common opinion among the managers was that Outokumpu's forthcoming continuous improvement program should be launched and driven more gradually in different Outokumpu organizations. They stated that the actualization of the forthcoming continuous improvement program should be more suitable to different sites of Outokumpu and it should be better contemplated than the OK1 program was. According to some interviewed managers, future's continuous improvement program should have a thoughtful implementation done by wide group of employees and managers and take local special features into a count. According to managers and

theories written earlier in this research, this means better communication and better understanding of local cultures. The managers emphasized how future's continuous improvement activities should have a goal in project accomplishments instead of the amount of projects. These opinions were similar stances with employees' opinions. The managers in Tornio stated in common as the future's continuous improvement program similar to the OK1 should be started from their foundation and in Outokumpu's case this means autonomous management AM as well cleanliness and orderliness 5S functions. One manager in Tornio expressed that before the future's continuous improvement program in Outokumpu could be executed, program should be exercised rigorously and even this in turn could increase the employee engagement.

Diversified views of Outokumpu's successful development in future's continuous improvement program were prominent among the Tornio managers. They stated following diversified opinions:

The first manager of the five interviewed managers stated how the previous continuous improvement model, the OK1 was admissible and useful in modest issues. The manager wanted to emphasize that the most important asset with the future's continuous improvement program should be the ability to accomplish permanent results. For him it was too bad that the OK1 program turned to measure performance of continuous improvement activities instead of results improved by the OK1. His statement expresses the idea that the amount of OK1 project activities were more important than the results that the OK1 program could improve.

The second interviewed manager had a wish to develop Outokumpu's old maintenance system where all components of the factory should be gathered into a database called KUTI (maintenance database) and therefore the operation of the factory could be actualized. According to him, this model could leave a possibility to operative level employees to perform their tasks while the operative service could focus on bigger objects of scrutiny.

The third manager wanted to have an improvement program which should be tailor-made to sections and departments. According to him, tailor-making would be beneficial because all divisions in Outokumpu could recognize their own resources and needs best. He stated, tailoring the continuous improvement program for the future, would require a



long term vision and a road map. The manager stated his opinion that Outokumpu cannot afford all the resources needed and Outokumpu do not have a wealth to do everything in a flash.

The fourth manager of the five interviewed managers expressed the idea how the forthcoming continuous improvement program should not be executed in a nitpicking way as the predecessor OK1 was executed. The manager emphasized that Outokumpu's forthcoming continuous improvement and its waste reduction program should start from the idea that costs originated from waste-chasing should be less than wastes reduced.

The last manager of the five interviewed managers wanted to involve employees to discussions and development of daily routines in different working sites. He stated that these discussions of daily routines would be directional as like where to go and how to execute daily routine practices. According to him, whenever decisions of these discussions would be concluded, then the employees should obey and additional bargaining would not be advisable. The manager stated that the lower level employees do not decide and dictate demands and he emphasized the absoluteness of decisions. According to him, the management team would place regulations which the lower level employees should follow and obey.

#### 5.4 Employee Views to Develop Continuous Improvement

It is worth noticing that to increase employees' engagement with OK1 activities, Outokumpu Tornio strategic business unit has paid OK1 fees to employees who have participated to OK1 projects. Swedish and British OK1 project participants have not had any similar fee paid like Tornio has had. According to Greene (2010, 169), e.g. in Japan employee's lack of participation in continuous improvement activities is not accepted by the team. Managers in Japan therefore reward more collectivist employees (Greene, 2010, 169).

##### 5.4.1 Finnish Employees

Based on the survey responses of Tornio employees, the majority of Tornio employees wanted to see the future with its continuous improvement program additionally simplified by focusing on AM and 5S functions due to the reason that employees

recalled these to fit Outokumpu Tornio site properly. The Tornio site employees wanted to launch next forthcoming continuous improvement program considerably and gradually. All the OK1 documentation, as well as the reporting of the OK1 projects and their results, was recalled to be very exhausting amongst the Tornio employees. Documentation's as well as reporting's supportive function were difficult to see among the Tornio employees and according to these employees, whatever the future's continuous improvement would be it should have less compulsion to reporting and documentation. For the future the employees in Tornio emphasized their aspiration to have the continuous improvement program where its functions would be embedded to regular work and daily routines. This aspiration is congruent stance with the managerial views in Tornio. According to the Tornio employees, to be trustworthy in front of employees, leaders and managers should pay attention in their own behavior and engagement. Employees in Tornio had a wish that the forthcoming continuous improvement activities should have leaders selected more closely with the focus on leaders' own starting point and engagement.

A few Tornio employees wanted to emphasize how less bureaucracy could release more brain capacity to other tasks and focused training on continuous improvement would be helpful for the future's program. A minor amount of individual employee opinions with an intention to develop continuous improvement program in Tornio were raised as follows: A few employees wanted to adjust the target setting of the OK1 projection where the amount of OK1 projects was significant. They also emphasized that projects as well as activities should have a direct impact on production. The employees in Tornio stated in their responses how the forthcoming continuous improvement should be straightforward without any unattached meetings. Some employees informed how the forthcoming continuous improvement activities should have teams composed of development engineers, process users and shift masters to enable improved utilization of the tacit knowledge. Some minor suggestions were made where Tornio employees wanted to reduce involuntarily inflated continuous improvement organizations and massive projects to fix small problems.

#### 5.4.2 Swedish Employees

To develop Outokumpu's continuous improvement program in the future, employees in Torshälla suggested smaller and less time consuming projects with a smaller amount of

improvement teams with more closely selection of the improvement targets. Employees in Torshälla emphasized the significance of leadership matters and as they should be taken into account when the forthcoming continuous improvement program is going to be designed. According to Torshälla employees, contrary to the OK1, the forthcoming continuous improvement program should be more exposed and it should pay added attention to employees' knowledge as well as experience which in turn should increase the employee engagement and attendance to the program. Torshälla employees expressed themselves further that to achieve a better natural development of the continuous improvement in the future, methods of improvement work should be adjusted to fit in the sizes of organizations. To advance with the continuous improvement in Outokumpu some employees in Torshälla pointed out the importance of enforced as well as educated employees and managers. According to the responses of Torshälla employees, better planning of improvement activities and start-up with qualitative teams instead of the importance of the amount of OK1 teams would be a success.

#### 5.4.3 British Employees

To deploy futures continuous improvement program, the employees in Sheffield wanted to highlight the understanding of business needs. According to their responses, this means that in the future, the continuous improvement program and its activities should be additionally allocated. In their responses they stated that improved target setting with simplified paperwork would be beneficial to the company and even the employees of Outokumpu would engage themselves strongly. Employees in Sheffield formed their proposal for the forthcoming continuous improvement as e.g. the operative level employees should be trained and explained to rationalize the importance of the improvement work and for what reason the employees should be involved into it. Additionally the British employees stated that the continuous improvement in the future should have additional intelligence depending on situations rather than following the theory.

#### 5.5 Managerial Views to Increase Employee Engagement

When the interview was conducted to receive managerial opinions concerning how to increase forthcoming employee engagement in the Tornio plant, the top managers of Tornio stated their opinions differentiated.

One of the managers interviewed pointed out his standpoint in his interview as follows: “whether or not”. He stated that whenever company management wants issues that matters to company, then the whole organization chain has to want it. Whenever managers want to have discipline and tidiness, discussions are unnecessary. All this places managers into a position where they have to create a clear vision for the future. When these managerial visions are to be executed, it is crucial how local managers act and how they show their engagement to their subordinates. This managerial view shows the lack of managerial communication capability in top-down bottom-up communication but at the same time it expresses the manager’s consciousness towards the theory of vision. Additionally this managerial statement is congruent to the theory of leading change management where leaders making change management decisions appears to make either or choices e.g. my way or highway.

Another manager interviewed wanted to act differently. He wanted to give more freedom to employees in order that they could make added improvements in the OK1 or even in other programs in Outokumpu. He had an opinion where less bureaucracy and more benchmarking should be successful in a meaning to gain engagement amongst the employees. This managerial view shows congruent understanding towards the theory that leaders should pay more attention to personal drivers.

The third manager interviewed had a confidence on people that they would be additionally engaged in the case they could have added impact on decision making. He also stated how autonomous management AM concept would increase the employee engagement to some extent by improving the employees own satisfaction at their work. He wanted to state an example of an employee engagement and causation from Tornio sintering section, where the accumulated dust on the top of oven caused problems to employees. Employees were having a natural volition to clean this dust before it was inhaled into their lungs. This managerial opinion shows congruent understanding towards the theory, drivers of change, by paying added attention to personal drivers.

The fourth manager interviewed stated that the employee engagement is all about the change of attitudes. Then he announced further: “no more courtesy to employees”. According to him, the employees in Outokumpu would be additionally engaged whenever they could be able to execute their best knowledge and skills in their job. He

stated that the Outokumpu employees in Tornio could be additionally engaged if the company would acknowledge the measured operative results to employees. He expressed his opinions as wiggly management and leadership in Tornio aspires to destroy employees' motivation and engagement. Curvy actions done by the managers and leaders in the OK1 were results from Outokumpu managers' pretension to execute OK1 actions with its breadth to every process. He wanted to emphasize that consult is equal with ruin. In this point it is not clear if he designated the OK1 consulting company or if this was just a generalized expression. He stated if the employee engagement in Outokumpu's continuous improvement program is wanted to be improved, then the future with its restorative program needs to be planned healthier. This managerial view announced that the measured results should be acknowledged to employees, which is relevant with the theory of communication. His opinion concerning the change and attitude showed some congruent idea against the theory drivers of change and especially changing the mindset. Additionally his statement of engaged employees and the execution of their best knowledge and skills is congruent with the theory of employee engagement expressed by Cook (2008, 21-22).

The last manager interviewed did not answer to the engagement question but he wanted to point out how OK1 consulting company's toolkit was too bureaucratic, although it was functional. He wanted to compare OK1 consulting company's toolkit with work safety tools utilized in Tornio. He stated further that working safety has been improved in Tornio with the ideology, by the book. To engage people even increasingly, he asked the following questions: "Why there are rules and laws everywhere and why people do need to obey them". "Why different shifts at the factory are acting differently while the rules are identical"? These managerial views and questions the last interviewed manager stated, did not bring any further value added for the employee engagement issue, that this sub chapter was to comprehend.

To increase the employee engagement in the OK1 activities, the OK1 participants in Tornio got a fee paid after closed and readymade OK1 projects. All Tornio managers accepted the payment of the OK1 fee. The payment of the OK1 fee in Finland but not in any other Outokumpu sites around the world was seen as a cultural difference between different Outokumpu sites. This matter is crucial to justify that the interviewed manager's were having some understanding of cultural differences in other nations and their expressions were congruent to the theory of managing the changes in context of

national cultures. According to one manager interviewed, the action of paying fees somehow alluded to the necessity to participate to OK1 projects without any own free volition. It is worth noticing that some employees in Tornio mentioned that their engagement was positively influenced by OK1 fee.

#### Remarkables

Outside of the formal part of the interviews, the managers interviewed wanted to highlight some significant issues of the forthcoming continuous improvement program and of the OK1 as follows:

All the managers interviewed emphasized that the timing of the future's continuous improvement program release is important. According to some managers, whenever programs similar to the OK1, are going to be launched it is notable whether programs are pronounced in negative meaning e.g. such as savings or in positive meaning e.g. such as improvements. Few managers stated that the way of articulation in context with the program launching affects to the engagement and it is important that understatements are not going to appear in any conditions. According to a few managers, ready-made programs as the OK1 was, should be immediately forgotten and the future's continuous improvement program should be planned by own people in the company.

A few managers emphasized how the OK1-activity in Tornio was seen as apart from several everyday routines whereas e.g. in Japan similar actions are built in to the whole society. This was seen as a difference between e.g. Japan and Finland cultures. According to some managers, the OK1 program in Tornio was seen as a failure due to the reason that it was launched straight past of the top managers and the way how the Tornio's OK1 program was started caused notable mistrust against the program already in its beginning. One manager highlighted the importance of managers' own engagement to their business and if the head office administrators proclaim their new visions, managers in sites should obey.

#### 5.6 Validity of Findings

The validity of the research findings make a reference allusion to the scope how they represent the phenomena they declare to stand for. The data reflected in findings should be valid if important issues to the participants are raised and if they are able to express their opinions and persuade the dialogue regarding the topic of research. (Smith 2002, 155.)

The validity of findings is a degree how accurate findings answers to the questions they were intended to answer. In this thesis the interview and survey questions were designed to get the employees' and managers' opinions as they wanted to express them, aiming to get research questions to be responded.

#### 5.6.1 Threats of Internal Validity

During the execution of the interviews and surveys the research was influenced by internal validity threats due to the reason that the case company Outokumpu was having employee co-operation negotiations in aspiration to reduce prominent amount of employees. These negotiations can have had reflection to less responding activity with the surveys executed. In the surveys executed in the Tornio site, the majority of screened survey participants were not able to accomplish the survey in Outokumpu's intranet. This IT-problem caused the necessity that some part of the surveys had to be executed in paper forms and this behavior could have caused smaller sample size in Tornio and as well some biasing from the survey executor. The maturation can be seen as an internal threat to this research. The surveys and interviews could not be held during the OK1 was in the most active stage in Outokumpu. To decrease internal threats of the study, the surveys were executed within the 3 different sites of Outokumpu.

#### 5.6.2 Threats of External Validity

External validity threats of this research were the screening of participants to the OK1 surveys and managerial interviews. Participants for the research survey as well as the interviewed managers had to have some experience and knowledge towards the OK1 actions and its management. These limitations in the participant screening makes findings applicable only to a specific group and cannot be generalized.

## 5.7 Analysis of Results

### 5.7.1 Analysis of Qualitative Data

To sum up, the response to the research question of What is the current situation of employee engagement in Outokumpu's continuous improvement program is as follows:

In the surveys executed, employees could assess their engagement level and report their opinions wherefrom the author of this thesis states that the moderate employee engaged towards the OK1 was obvious. Employees wanted their superiors to be more engaged than they are at present and expressed that their own engagement could have been even better if issues around OK1 had been done differently. Responses from the surveys outlines the employees' volition to participate something new and how they were interested in the subject, but the managers and leaders could not sustain it impeccably whilst the actualization of the OK1.

To summarize the answer to the research question of Why do motivating problems, if any, emerge in Outokumpu's continuous improvement program is as follows:

A majority of the employees with none or small own engagement emphasized how the tools of OK1 depressed their attitudes towards the OK1. The managers as well as the employees stated consistently that the OK1 tools used in Outokumpu were too bureaucratic and time consuming. Employees even stated that OK1 tools were using gimmicks and could only be interpreted by specialists, which in turn caused some qualification among employees which led to employee sects, snobbish insiders who believed in OK1 and outsiders who could not understand the purpose of the OK1. Few employees expressed their frustration towards the OK1 due to the reason that simple issues or problems were solved with inflated team organizations in 12 weeks, employees became frustrated.

Unengaged employees as well as the interviewed managers expressed the lack of engagement from the administration level which in turn can have caused added motivation problems. Employees with smaller engagement stated how leadership issues affected their motivation negatively towards the OK1 program. When the amount of ongoing projects became more significant than an option of projects with a decent goal,



employees lost their faith in OK1. Opinions from five managerial interviews as well as survey responses from 76 employees can portray an obvious image that the OK1 consulting company or any other similar kind of consulting aid would not be necessary, or not even wanted, for the future's continuous improvement program in Outokumpu. Based on the answers from the managers interviewed, OK1 consulting company's politics to run identical standard of activity of continuous improvement program in every section and function notwithstanding the special features of production lines in every production division was doomed.

The research question of How can employee engagement be increased in Outokumpu's continuous improvement program in the near future, recapitulates as follows:

All managerial answers confirmed the idea that the managers in Outokumpu Tornio were executing their leadership policies in different manners. To increase employees' engagement in Tornio three managers were ready to use to some extent compulsory manners whereas two managers wanted engage employees by increasing their freedom and involvement.

When managerial answers are to be compared with the theories of the organizational change and the leading change management, the top managers were largely ignoring the idea of humanistic perspective. Only two of five interviewed managers had some added humanistic perspectives in their leading manners. Savolainen (2007, 3-6) states the two way and face to face communications are endeavors for good change managers. The interviewed top managers in Outokumpu were keen to achieve added communication in alignment of change management in the future but there were no proofs that this had happened within the OK1 activities. When the managers' opinions are to be compared with the theories of the organizational change and leading the change management, a majority of the top managers in Tornio expressed themselves to give an impression as they would be charismatic leaders. According to theory of leading change management, in exchange for charismatic leader image, the managers may dismiss to some extent the diversity of control.

When OK1 actions and its executions are to be compared with the theory of evolutionary and revolutionary change, none managerial or none employee answer cannot support this issue. The reason why the theory summarized in chapter 4 and the

answers given by the managers interviewed and the screened survey participants do not meet in this context can be due to the reason that interview and survey questions were not appropriately designed to fit in this theory from the beginning of this research. Based on the researcher's own experience in the case company, the Outokumpu OK1 program was executed and expanded further by degrees in small quantities in a long period of time from the year 2005 all the way to 2011. This in turn makes the OK1 program to be an evolutionary change and which in turn should have had positive influence on employee morale and engagement which however cannot be proven.

To compare the managers' and the employees' opinions with the theory, drivers of change, the managerial expressions can give an additional clue of how changes of cultural components, inspired some opinions amongst the Tornio managers. The importance of leadership and employee behavior in changes has been predicated in managerial views although methods to execute matters that this chapter deals with were not assessed. Matters that change the mindset, amongst the managers and employees opinions, were able to find out from only one managerial answer.

When managerial opinions are to be compared with the theory of managing changes in the context of national cultures, all managers had references towards it. As all managers stated in their answers, e.g. of fee paid in Tornio, managers showed some congruent understanding of culture impacts between nations. Tornio managers were even pensive with cognitions of cultural differences between e.g. Japan and Finland. A few managers from Tornio had had the possibility to visit and study the Japanese versions of operational excellence. Executions of operational excellence and continuous improvement in these countries were seen differentiated due to cultural differences between nations.

Findings from interviews and surveys were not unambiguous designated to be compared with the theory of employee engagement. The theory of employee engagement in the literature review chapter is announced in terms of consistency for this thesis. Still, some answers and managerial views indicate that Outokumpu managers as well as employees like to strive towards better employee engagement. Both parties seemed to emphasize the importance of employee engagement but could not totally fulfill it.

Findings from the point of view leadership and communication theories and their multiplicity showed how both parties were keen to develop communication further but the managers in Tornio were not overly keen to accept employees' feedback. The role of leadership and its significance in organizational changes were not demonstrated in managerial opinions but the significance of it was obvious. A big part of employees stated their engagement to be in a level as it is due to the fact that they need explicit superior orders.

As the theory of vision and sustainable organizational change gives the certainty of how proper vision plays a significant role in employee engagement, only two managers of five interviewed, could express their consciousness of this factor. To have motivated and engaged employees, as an apparatus of the OK1, the managers interviewed did not specify in their answers how to use this in a meaning to aim to the same goal. At the time this research was conducted Outokumpu had a vision as to be number one in stainless but that is not an exact vision just only for the OK1 and therefore the vision do not bear any tangible asset for the OK1 participants. To be successful in future's continuous improvement program, Outokumpu should create an understandable vision, specially designed to continuous improvement and which in turn employees could adopt.

It is important to notice one managerial opinion how the whole OK1 toolkit was compared to the working safety toolkit in Tornio. According to this manager, the working safety in Outokumpu Tornio was improved with the ideology, "by the book", as well as the OK1 action in Outokumpu was improved also, although he stated that the working safety model was more successful than the OK1 was. Based on the theory of an appropriate vision of Henry (2008, 11), Cook (2008, 120-122), Daniel et al. (2001, 68), Schneider et al. (1996, 3, 15) and the researcher's own experience in the case company, working safety in Outokumpu had a decent vision where employees could aim. The Working safety vision in Tornio was based e.g. on lost time injury frequency rate (LTIFR) and on other measureable actions which were quantified. A vision of the working safety was not inspiring but highly meaningful and memorable. Employees could steer their actions to decrease the total amount of injuries. This vision in safety may have changed the working climate in Tornio towards an increasingly safe working environment. The vision, Outokumpu undisputed number one in stainless, was the vision for OK1. Even though the OK1 was using measurements for e.g. wastes, costs,

savings etc. in numbers as working safety program in Tornio congruently did, OK1 results were not communicated directly to employees and only enlightened managers and educated experts could make sense of these readings.

Opinions among some managers in Tornio and opinions among employees indicate that employees wanted to involve themselves in the future designing as well as a few managers wanted to hear employees' opinions in this issue. According to the findings, to increase employee engagement in Outokumpu in the forthcoming continuous improvement program managers should improve their communication practices and provide employees with the data they can understand.

### 5.7.2 Analysis of Statistical Results

**Table 3.** Survey sample representativeness and results of own engagement

	Tornio/ Finland		Torshälla/ Sweden		Sheffield/ England	
Population	2375		369		595	
Screened survey participants	100		40		40	
	Blue collars	White collars	Blue collars	White collars	Blue collars	White collars
Sample size	31	24	8	8		5
Combined BC + WC sample size	55		16		5	
Own engagement level (OE)	BC	WC	BC	WC	BC	WC
1 / not at all	1	3	3	0		0
2 / some	12	3	1	2		0
3 / temperate	13	9	2	3		2
4 / a lot	5	9	2	3		3
Combined OE; BC & WC						
1 / not at all	4		3		0	
2 / some	15		3		0	
3 / temperate	22		5		2	
4 / a lot	14		5		3	
Mean own engagement	2,8		2,8		3,6	

The original hypothesis testing idea in this research was to test if there were an association or a difference in OK1 engagement between Outokumpu Tornio and Outokumpu Sheffield employees and between Outokumpu Tornio and Outokumpu Torshälla employees. Because of the small sample size from Torshälla and from

Sheffield, these hypothesis tests and analysis had to be refused. The second idea with the hypothesis testing was to prove if there were no association between the type of employee rankings and the own engagement level. Even though Tornio sample size was small, Tornio samples were sufficient enough to do chi-square testing with the sampled data to test the null hypothesis  $H_0$ : There is no association between the type of employee ranking and the own engagement level towards OK1. The alternative hypothesis  $H_a$  for chi-squared testing is as stated: There is an association between type of employee ranking and the own engagement level towards OK1.

**Table 4.** Actual values of own engagement in Tornio

Actual values			
	Blue collar	White collar	Total
Not at all	1	3	4
Some	12	3	15
Temperate	13	9	22
A lot	5	9	14
	31	24	55

**Table 5.** Expected values of own engagement

Expected values			
	Blue collar	White collar	Total
Not at all	2,25	1,75	4
Some	8,45	6,55	15
Temperate	12,40	9,60	22
A lot	7,89	6,11	14
	31	24	55

Expected values are calculated from formula:

$$E = \frac{O_i \times O_j}{N}$$

where

$E$  = Expected value from row  $i$  and column  $j$

$O_i$  = Total sum from row  $i$

$O_j$  = Total sum from column  $j$

$N$  = Total sum of samples in table

For example “not at all” expected value for blue collar responses is going to be calculated as

$(4 \times 31) / 55 = 2, 25$ . Corresponding count for white collar responses is  $(4 \times 24) / 55 = 1, 75$ .

Normally expected values do not need to be calculated manually because most of common statistical programs count these values automatically or at the latest when they are demanded.

To go further in chi-square value calculation, deviation of actual and expected values, need to be calculated and these in turn had to be squared.

**Table 6.** Deviation

Deviation (actual value - expected value)		
	Blue collar	White collar
Not at all	-1,25	1,25
Some	3,55	-3,55
Temperate	0,60	-0,60
A lot	-2,89	2,89

**Table 7.** Deviation <sup>2</sup>

Deviation <sup>2</sup>		
	Blue collar	White collar
Not at all	1,57	1,57
Some	12,57	12,57
Temperate	0,36	0,36
A lot	8,36	8,36

**Table 8.** Deviation<sup>2</sup> / expected value

Deviation <sup>2</sup> / expected value (D <sup>2</sup> /e)		
	Blue collar	White collar
Not at all	0,70	0,90
Some	1,49	1,92
Temperate	0,03	0,04
A lot	1,06	1,37

Chi-square calculated is the sum of cells shown in Table 7 and is going to be counted from the formula:

$$\text{Chi-square} = \sum_{i=1}^n D^2/e$$

thereby our calculated chi-square is  $0,70 + 0,90 + 1,49 + 1,92 + 0,03 + 0,04 + 1,06 + 1,37 = 7,51$ .

Degrees of freedom = (number of columns - 1)  $\times$  (number of rows - 1)  $\Rightarrow (4 - 1) \times (2 - 1) = 3$

If we would like to be 95% sure that the hypothesis is right, we would demand a 5% Level of Significance, which equates to a 95% Level of Certainty. This in turn gives a number 0,05 to be utilized in Table 8 to test our calculated chi-squared value to a value from statistical table.

**Table 9.** Chi-Square distribution (Eck & Ryan, 2012)

Degrees of Freedom	Probability ( $p$ )					
( $df$ )	0.5	0.10	0.05	0.02	0.01	0.001
1	0.455	2.706	3.841	5.412	6.635	10.827
2	1.386	4.605	5.991	7.824	9.210	13.815
3	2.366	6.251	7.815	9.837	11.345	16.268
4	3.357	7.779	9.488	11.668	13.277	18.465
5	4.351	9.236	11.070	13.388	15.086	20.517

Because the calculated chi-square statistics is less than the critical value from chi-square distribution table

$$\Rightarrow 7,51 < 7,815$$

the hypothesis  $H_0$ , there is no connection between the type of employee ranking and the own engagement level towards OK1, cannot be rejected.

Practical conclusion from the chi-square test is: based on the sample selected, there is no reason to believe that there is an association between the “type of employee ranking” and the “level of own engagement” variables. Practically, it does not necessarily mean that this association does not exist, but according to the selected small sample and collected data, it is impossible to claim this association exists. One reason for this unconvincing result is the limited sample size and sampling procedure used.

Therefore, the result of this analysis should be considered for the practical use with caution. This thesis work was naturally limited by time and financial constraints. Despite the preliminary results presented in this chapter, there is plenty of room for further development. Additional research should be done investigating the potential association between the variables of interest and more appropriate and sophisticated sampling procedures should be utilized.



## 5.8 Proposal for Improvement of OK1 Management in Tornio

When taken into consideration of what is said in the chapters earlier, reviewing the results gathered and observations made by the researcher, few proposals for the forthcoming continuous improvement management team can be presented. Although some of these matters can be found in the chapters above and even though overall engagement in the OK1 can be decoded as moderate, it is worth to emphasize some specific issues in a point of the researchers view.

In Outokumpu within its OK1 program, the management may have failed to articulate its objectives to employees. It may be possible that Outokumpu employees in Tornio or also in other SBUs did not know why changes were initiated and towards which goals employees should focus their energies. Without such focus, the change process may have diminished and lost its fascination among employees.

As Henry (2008, 11), Cook (2008, 120-122), Daniel et al. (2001, 68) and Schneider et al. (1996, 3, 15) proves, it is evident that the implementation of the forthcoming continuous improvement program could require a clear and visible vision and strategy. It is crucial to the company how the forthcoming continuous improvement program is going to be stated and visualized, in a meaning to show to employees how the administration and management level aspire to be engaged towards it and how they are going to support all of its polymorphic issues. Leadership strategy should be related to standard daily routines in order the working culture could be changed towards the new continuous improvement thinking via changing the working climate in Outokumpu. As Schneider et al. (1996, 13 - 16) provides the idea that by changing the working climate, Outokumpu's future's continuous improvement program is going to have a good chance to be a one part of the daily work and without any bigger resistance against it if the working climate change is taken into account.

For the moment of the new continuous improvement implementation, it is additionally helpful that the managers pay attention to selection of eligible and developable leaders and their training. Overall training, in continuous improvement issues, may be beneficial also to floor level employees and therefore suitable leaders could give direct individual guidance of how one's work could support the company on its way towards its continuous improvement vision. It is thinkable that leaders need more training in

issues e.g. how to change floor level worker's attitudes towards cultural and climatic change. By changing the working climate and creating a tangible vision, employees would strive for the preferable working place and successful company.

The tools that are going to be used in the next continuous improvement program should be chosen painstakingly with the idea of being adjustable to meet the area specifications they are designated to support. The employees would not appreciate any additional consults with readymade tools. Reporting of results should have a possibility to utilize computers for the purpose that tools should be more modern than tools used with the OK1 program. It could increase employee involvement, if the employees could participate the planning moment of tools which are intended to be used. It is well worth considering how the top down communication and especially bottom-up communication should be organized in a proper way. It would be beneficial for everyone in Outokumpu to have information and communication channels additionally transparent and understandable for employees. Both employees and managers in Outokumpu would enjoy the benefits of added effort to communication channels. Good managers are good listeners and effective communicators. (Gildenhuis 2004, 207).

It would be helpful for the managers and as well as for the leaders in Outokumpu to understand how engaged employees are expecting the loyalty and complementary engagement from their employer. It can be realized for example in a form of permanent employment. Today, this issue is hard for managers to fulfill fairly because of the actual finance crisis in the Europe. The time of crisis and subconscious fear of missing one's work can decrease employees' engagement and from that point of view, the time of the new continuous improvement program launch should be considered carefully.

## 6 CONCLUSION

The constantly changing business environment is creating new challenges to companies to succeed. Companies have been utilizing different methods in their organizations to make their operations to be additionally beneficial. Even though the ideas of continuous improvement and the total production management (TPM) and its relative total quality management (TQM) are matured today and used by companies around the world, they are quite new ideologies for Outokumpu, especially to its lower level employees. Outokumpu's continuous improvement program OK1 can be assimilated to TPM ideology. Even though Outokumpu's OK1 program in different SBUs was executed in similar manner to different kind of employees into different cultures, it gained different results and yields from different SBUs to the company.

The main objective of this research was to acquire more knowledge of employees' engagement towards the OK1 and help the management team to build an understanding of how employee engagement can be increased in the forthcoming continuous improvement program. Furthermore, this research shows the importance of the change management when companies are attempting to achieve sustainable and beneficial changes.

Employee engagement in Outokumpu's OK1 program in different SBUs, found in this research in general, was mainly moderate. That does not still give any relief to managers because the employee engagement could be improved. For example to reduce wastes that OK1 was striving to solve, could be solved with a smaller amount of money and energy by changing the vision, the working climate and by improving employee engagement.

To enhance employee engagement in the forthcoming continuous improvement program, Outokumpu managers can benefit from the findings that this research highlights. First of all, both managers and employees are keen to have more open communication. Whenever changes are to be made, it is important to take care of communication and information. Communication should be two way, top down, transparent and avoid any informational gaps.

One of the most significant findings in the literature review is the suggestion of how carefully designed vision can give an outstanding starting point to any organizational change at which time employees could be more engaged towards the change. (Henry 2008, 11; Cook 2008, 120-122; Daniel et al. 2001, 68; Schneider et al. 1996, 3, 15). This means that the first step with change management and employee engagement should be the creation of inspirational, understandable and some meaningful vision of goal, which employees could strive towards. This important finding is divergent from the first step order from Kotter's (1996, 21) manifest, where the illusion of urgency is the first and the most important step when making change in organizations.

As the world has become globalized, the matter of cultural influence between nations has become important. Whenever international companies, such as Outokumpu, expand their activities and functions to foreign countries and continents, managers should have a better understanding and consciousness of cultural impacts to business and employees. This study found some difficulties in employee engagement e.g. due to the reason that cultural values were not taken into account when operational excellence program was launched. After all how tense the correlation between the OK1 management and cultural impact is, remain undisclosed. This could be an interesting topic for future research.

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Interview questions for the managers:

1. Could you please tell me something about your working history
2. What was your first reaction of OK1-program?
3. What kind of internal discussion did have with your colleagues (top managers) about the OK1 program before executing it?
4. Could you please describe the difference between your present knowledge and your first reaction of OK1-program?
5. Would you like to act differently with OK1-program today?
6. What is your opinion of OK1-fees to OK1-project participants?
7. What is your expectation of continuous improvement in the future?
8. How would you like to improve continuous improvement program in the future?
9. Could you please tell me your own opinion what should be done to engage employees even more for autonomous management and continuous improvement activity?
10. Your own opinions of the external consulting company for Outokumpu's OK1 program.
11. Your own opinions of something that I did not ask.



Survey questions for the employees:

1. Your own opinion of OK1?
2. In general how much did you felt engagement to OK1-program?  
(1 ^ not at all; 2 ^ some; 3 ^ temperate; 4 ^ a lot)
3. Why?
4. Asses the engagement level of your OK1-superiors  
(1 ^ not at all; 2 ^ some; 3 ^ temperate; 4 ^ a lot)
5. How would you enhance continuous improvement in the future